Integrated Nuclear Infrastructure Review (INIR)

Service for countries embarking or expanding on nuclear power programmes

Milko Kovachev, Head
Nuclear Infrastructure Development Section
Nuclear Power Division - Nuclear Energy Department
Milestones Approach 2007 (rev.2015):

- The aim of the document is to help Member States to understand the commitments and obligations and plan the development of a nuclear power programme.

- The Milestones Approach has been adopted as the basis for all guidance and services relevant to countries embarking or expanding their nuclear power programmes.

- Countries that already have nuclear power can also assess the risks and their preparedness for expansion.
## Milestones in the Development of a National Infrastructure for Nuclear Power (NG-G-3.1 Rev 1)

1. National position
2. Nuclear safety
3. Management
4. Funding and financing
5. Legislative framework
6. Safeguards
7. Regulatory framework
8. Radiation protection
9. Electrical grid
10. Human resources development
11. Stakeholder involvement
12. Site and supporting facilities
13. Environmental protection
14. Emergency planning
15. Security and physical protection
16. Nuclear fuel cycle
17. Radioactive waste
18. Industrial involvement
19. Procurement
Safety, Security, Safeguards

IAEA Safety Standards
for protecting people and the environment

Establishing the Safety Infrastructure for a Nuclear Power Programme

2011

Specific Safety Guide
No. SSG-16

IAEA
International Atomic Energy Agency

IAEA Nuclear Security Series No. 19
Implementing Guide

Establishing the Nuclear Security Infrastructure for a Nuclear Power Programme

2013

Guidance for States Implementing Comprehensive Safeguards Agreements and Additional Protocols

IAEA
International Atomic Energy Agency

Vienna, May 2013

IAEA Service Center
2007-2020: The Milestones approach and INIR Service

2007, 2015 (Rev.1)  
2008, 2016 (Rev.1)  
2009, 2011 (Rev.1), 2017 (Rev.2)
Integrated Nuclear Infrastructure Review (INIR)

- The objective of an INIR mission is to assist the Member State in determining the status of its nuclear power infrastructure development.
- Based on the Milestones Approach:
  19 Infrastructure Issues
  3 Phases, 3 Milestones
- International expert peer review led by a high level IAEA manager.
- Identifies areas for further action and makes suggestions and recommendations.
- Requested by Member State government - results are delivered to government (and decision-makers).
- Since its inception in 2009, the INIR service has been conducted in 21 Member States upon their request.
Key benefits of INIR: Creating enabling environment for the project

- Review of the environment in which the new project will take place and identify gaps in nuclear infrastructure not adequately addressed to enable the project;
- Engaging all stakeholders and aligning them to the needs of the programme and support the project implementation;
- Ensuring adequate attention and resources which are beyond the resources needed for the project itself.
- Ensuring public information, impacting the public perception and public support for the programme in the country and internationally.
• 30 INIR missions in 21 Member States between 2009 and 2020
Member States practice in using IAEA peer reviews and Advisory service critical for nuclear power programme.

INIR phase 3 methodology is building upon critical peer reviews in the fields of safety, security and safeguards.
Take Away Points

• Milestones approach is framework for embarking and expanding countries and basis of IAEA support

• Overall programme split in 3 Phases and 19 Infrastructure Issues
  – Phase 1: building awareness on the specific aspects of nuclear, understanding the commitments for safe use, planning for Phase 2
  – Phase 2: building institutions and preparatory work for contracting
  – Phase 3: managing construction and preparing for operation

• INIR missions helps MS to evaluate status of nuclear power infrastructure and identifies areas needing improvements

• INIR integrates the Member State efforts toward common goal.
Thank you!